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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,079	02/07/2001	Wataru Kubo	P20277	4565

7055 7590 04/19/2004

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

15

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,079

Applicant(s)

KUBO, WATARU

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicant's response of 2/10/04 has been considered with the following results.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1,2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brezoczky considered with Jutte et al and all further considered with Kamiyama et al.

Brezoczky et al teaches in this environment a plano-convex objective lens wherein the side facing the medium is flat – note col. 8, lines 21 plus. This is interpreted as meeting the required single objective lens limitation. With respect to the specifics of the index of refraction, no such specifics is mentioned, nevertheless, Jutte et al discloses a single objective glass lens having an index of refraction of at least 1.6, with a value of rms as 22 lambda. Applicant's attention is drawn to col. 5 lines 15-20 as well as col. 4 lines 65 plus.

It would have been obvious to modify the base system of Brezoczky et al with the above teaching from Jutte et al motivation is to use existing materials for the objective lens, i.e., glass LAL10. Selection of

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such elements is considered a selection between alternative equivalent materials and predicated upon such considerations such as cost, availability, and reliability.

Although Jutte et al provides for various NAs, the particular ability of having a NA of at least .7 is taught by Kamiyama et al, note col. 1 lines 12-58.

It would have been obvious to modify the base system of Brezoczky et al – Jutte et al with the additional teaching from Kamiyama et al; motivation is to increase the flexibility of the objective lens so as to be used in the next generation optical recording/reproducing systems, which increase the recording density.

Response to Arguments

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2 and 6 as stated in paragraph 3 above, and further in view of Official notice and Kiriki et al.

With respect to the process step of claim 3, the ability of producing objective glass lenses by a mold is well known and Official notice is taken thereof.

Furthermore, the ability of having an outer flange for an objective lens is taught by Kiriki et al – see figure 19.

It would have been obvious to modify the base system of the references relied upon above with respect to claims 1,2, and 6 with the above additional teachings in order to provide for a molded glass lens with a flange so as to be retrieved from the mold.

6. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2 and 6 in paragraph 3 above, and further in view of Nakaoki et al.

Independent claim 5 includes an additional magnetic coil on the flat surface of the objective lens.

The above combination of references as relied upon with respect to claim 1 fail to specify such a position. Although Kamiyama et al provides for the magnetic coil, it is not on the surface of the objective lens.

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Nakaoki et al teaches in this environment the placement of a magnetic coil onto a flat surface of the sil – see figure 6 for instance.

It would have been obvious to modify the base system of the references relied upon with respect to claim 1, with the additional teaching of Nakaoki et al, motivation is seen as a relocation of parts (the coil structure for a near field sil) from one location to another. Relocation of parts without any unexpected results is not considered patentable. Such relocation of the coil would provide for a narrower information pulse upon the record medium (due to the magnetic field and optical ray interaction) and narrowing the recorded pulse increases the recording density.

Hard copies of the application files are now separated from this examining corps; hence the examiner can answer no questions that require a review of the file without sufficient lead-time.

Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
Art Unit 2653



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